Menlo Park Notebook #177 [N-79-03-00]

This undated notebook was used by Francis Upton to record references to generators found in Menlo Park Notebooks #1-#13 and #15. It probably dates from 1880 or 1881. The label on the front cover is marked "Note Books" and "Index Machines." The book contains 282 numbered pages.

Blank pages not filmed: 42-282.

LIBRARY OF THE

BOARD OF PATENT CONTROL,

120 BROADWAY, NEW YORK.

From Library
44 Broad St. N.Y.
May 1, 1894

Book 1 page 25

Tuning fork machine good drawing Dec. 15, 1878.

Page 27 plan connections magnets

P. 29 same

31 Drawing tuning fork machine

33 length vibrations tuning fork

35 Train of gears to run dynamo dated Dec. 17. 1878 axes given and machine partly drawn

37 from machine

Book 1

Various forms Dec. 26, 1878.

45–52

Faradic testing machines to discuss laws page 53

p. 54

90–97 various diagrams of currents from magnets

pages ~~104~~ 102–107 figures on grass.

p. 111 diagram

113 Wheatstone bridge of magnetism

March 12

Book 1, page 121 – 125

The discharge from a magnet measured by means of sounder.

Armature on the magnet tried and then removed and the discharge was found to be stronger sharper and shorter.

page 131 Figure of armature

Book 1 Page 137-153 87

Tests of main power

Book 1 p. 219-223

Figures as to dimensions magnets

Also p 232 law concerning economy

Page 245 Table of resistance armatures

10 Ohms	316 turns
5 "	223 "
4 "	200 "
2 "	141 "
1 "	100 "
&c	&c

page 246 "picture" long magnet

248-249 figures relating.

Dated and filed [illegible] 19

Book 1 page 254 — 257

Plans of connections for testing wire when last

No date page 9-11

Book 2 Switch for Wallace machines Dec 10, 1878.

Book 2 p 13 Tuning fork Dynamo Dec. 10

Book 2 p 15 Tuning fork dynamo plan of steam cylinder and magnets. Dec. 10

p. 16 direction Dec. 11

p. 19 Gramme machine commutator current plan. Dec. 20

page 21 When the internal resistance of magnet equals external best effect. Edison

Book 2 page 23—25.
Gramme machine diagram
p. 27 Gramme with rotating magnets
p. 28 Ring and magnets rotating
to Page 72 various diagrams of magnets and line of force undated
On page 75 date of exp in bringing up spirals by battery
Feb. 8, 1879
Gramme machine used on spirals page 85 resistance in line with spiral which measured cold .73 ohm and had in line with it 2½ about 4 ohms

Book 2 pp. 90-91
Ends armature Edison's first
magneto
Book 2 p. 149
Date Mac Laughlin return
from the Chanslese river
June 6, 1879,
Picture of machine im-
mediatly following this
Two binding posts at the
base
Book 3 from p 73-81 undated
diagrams of magneto
Date near this March '79
Book 3 p- 143-150
Date Jan 12-15, 1880
Commutator drawing by
Mr. K
to page 177 a number
of undated drawings of
magnets and machines

Book 4 p. 33 No date
drawing resistance coil
Book 4 p. ~~34~~ 41-45 no date
counter shafts for running Gramme
at various speeds
Immediately after date.
Jan 22 1879

Book 4 Page 77 — 105
Feb. 15, 1879.
Edison's magneto electric machine Account of Exs to get current speaks of putting a Lathery and the Gramme machine on the magneto and obtaining an arc.
refers to
Book 7 pp. 169-175
9 " 181
28 " 1-81

Diagram machines

On page 123 is the wonder where disks are revolved in the opposite directions so as to take in all the lines of force

To page 145 various diagrams undated of machines and magnets. after these Page 147 Feb. 19. 1879 account of Exp on magneto. Where the current of the Gramme was put on the Edison and the Edison on the Gramme to see if the machine turned harder.

Book 4
Page 155 Date Feb. 19, 1879 19

Battery put on Gramme and the ring run. Three iron wires heated four feet long.

Gramme on Edison

Page 159 Feb. 20 1879

Suggestion as to opening one side of Gramme to run

Jablochkoff.

Page 182 ~~165~~ No date

Directions for making boxes for resistance

Immediately after date March 10, 1879.

Book 4 page 280, 282 no date

Diagram connection

Book 5 Nothing

Book 6 p 12 Embraces No date
Estimates concerning the power
required to drive the Wallace
machine

Book 6 p 21-39 No Date
Various estimates as to Gramme
efficiency and diagrams
of magneto and coils

Book 6, Page 47-51 No date
Estimate capacity Gramme
Notes of various experiments
No dates. followed by date
of ~~Jan 30, 1879~~ where
the gramme was used to
bring up wires. followed
by date of Jan 30 1879

Book 6 no dates to a large number of calculations as to distribution, cost, and diagrams of no great importance

Book 7, page 9. Dec. 13, 1878
attempt at iron commutator

Book 7 page 23 Dec 17 1878
Tel Co.
Dr Meister from of dynamo machine showing a powerful magnet.

page 25-27 Dec. 17. 1878
various forms of

page 31 Dec. 17, 1878
Small Dynamo for telephones

page 33-60 Dec 17, 1878
Various forms of dynamos and especially the early drawings of Edison's first

Book 7, page 61

Dec. 29, 1878 25

Dynamo machine
Full drawing of T. Edison's
first machine.
Sketches follow this by
Butler
Page 62 – 138
Undated but are various sketches of
the loops of the Gramme
and the Siemens machines
showing how they are related
and and a number of
attempts to commutate the
currents from a series

Page 139 Jan. 7 1879
Drawing for resistance
box.

Page 147 Jan. 7, 1879.
149

Book 7

The iron lamp
is shown on page 151
Date Jan. 9. 1879 T. A. E.

From page 169–213 Jan. 9 Feb. 15
a large number of devises
for commutating currents
and the ~~discuss for~~ di-
agrams of connection for
the Edison dynamos.

Book 8 Faradic machines
Page 13 Dec. 20. No. 1.
Test-machine for driving ~~Exciter~~ machine
Pages 80 to 138 a large num-
ber of tests of the Grammes
machine showing the relation
between the strength of current
and the E. M. F. from the
armature.

Book 8.
Page 138-175 May 10, 1879 29

Tests of the Edison machine

Page 176 Speaks of the magnets being quantitized and the coils connected by threes this was from the Jeannette

Date some after of June 9, 1879

Under date of June 10, 1879 is mention New machine Gramme on magnets and after that follows some tests showing relation between current on field and E. M. F. from armature

June 11, New Machine on its own field

Rest of book Test from June 1

to June 13 showing
relation of field to
the E. M. F. of the armature

Book 9 Dec 15 '78
pages 5-13 T.A.E.
Dynamo Mac

Book 9. page 25-29 Dec. 16 1879
Dynamo machines

Book 9. p. 49-75 no date
machines

page 77 Wheatstone bridge
for magnets

page 77— 109 no date
magnets devices

Then date Jan. 14, 1879

145—155 no date
magnets devices

Book 9 page 175
Feb. 16, 1879

Gramme ring electric en

page 181-211 Diagram
of connections Feb. 15, 1879
for commutating

Book 10 from 1 to 96- end
full of drawings for testing
the theory of magnetism
and also sketches from
Edisons first magneto.
Dec. 16, '78 to Jan. 1, '79

Book 11

p. 13 Non commutator no date
15 Lines of force " "
19 Non commutator Dec. 28, 1878.
26–29 " " no date
31 Faraday's magnet no date
37 Magneto machine no date
details

82–~~83~~ Split ring Gramme
Feb. 20, 1879.
83 Winding Siemens Feb. 20, 1879
84–85 Non commutator Feb. 20, 1879.
86 Remark "Move the commutators and make the Gramme give off any current that may be required for it" Feb. 20, 1879.
87–89 Non commutator
95–100 Edison's Dynamo Feb. 17, 1879
101–110 Non commutator Feb. 1879.
110–127 ——— ———
Rest of book no date and only attempts at non commutator at intervals

p. 3 attempt Non Comm — No date
5-9 Exs. on friction using a magnet to take off the weight. Dec 20, 1878.
11 Gramme machine balanced with battery. no date
13-69 Non Commutators. No dates.
86-87 Final brought to mean Jan 10 1879

No dates
Estimates of lumps
attempts non commutator

Book 13

p8 Mem commutator Jan. 1, 1879.
19 Magnet in ring Jan. 1, 1879.
25 Notes on making Edisons generator c. B. Jan. 1, 1879.
26-59 Details Edisons magneto Jan. 3. to Jan. 9, 1879.
91-93 " Jan. 6.

Book 15

p. 47 - 58 Large ring machine
March 9, 1879

89 Mr. Edison speaks of
experiments with small
dynamo March 5, 1879.